

# Dental Sealants



"...effective in the primary prevention of tooth decay."<sup>1</sup>



**Oral Health in Wisconsin: A Fact Sheet**

**Wisconsin Department of Health and Family Services  
Division of Public Health**

## What is the public health issue?

Oral health is integral to general health.<sup>2</sup> Although preventable, tooth decay is a chronic disease affecting all age groups. In fact, it is the most common chronic disease of childhood.<sup>2</sup> The burden of disease is far worse for those who have restricted access to prevention and treatment services. Tooth decay, left untreated, can cause pain and tooth loss. Untreated tooth decay is associated with difficulty in eating and with being underweight.<sup>3</sup> Untreated decay and tooth loss can have negative effects on an individual's self-esteem and employability.

### **In the U.S., tooth decay<sup>3</sup> affects:**

- ✓ 18 percent of children 2–4 years
- ✓ 52 percent of children 6–8 years
- ✓ 61 percent of teenagers age 15

## What is the impact of dental sealants?

Dental sealants are a plastic material placed on the pits and fissures of the chewing surfaces of teeth where up to 90 percent of decay occurs in school children.<sup>4</sup> Sealants prevent tooth decay by creating a barrier between the teeth and decay-causing bacteria. Sealants also stop cavities from growing and can prevent the need for expensive fillings. Sealants are 100 percent effective if they are fully retained on the tooth.<sup>2</sup> According to the Surgeon General's 2000 report on oral health, sealants have been shown to reduce decay by more than 70 percent.<sup>1</sup> The combination of sealants and fluoride has the potential to nearly eliminate tooth decay in schoolage children.<sup>5</sup> Sealants are most cost-effective when provided to children who are at highest risk for tooth decay.<sup>6</sup>

## Why are school-based dental sealant programs recommended?

In 2002, the Task Force on Community Preventive Services, a national independent, nonfederal, multidisciplinary task force appointed by the director of the Centers for Disease Control and Prevention (CDC), strongly recommended school sealant programs as an effective strategy to prevent tooth decay.<sup>3</sup> CDC further estimates that if 50 percent of children at high risk participated in school sealant programs, over half of their tooth decay would be prevented and money would be saved on their treatment costs.<sup>4</sup> School-based sealant programs reduce disparities for children.<sup>7</sup>

### **Related U.S. Healthy People 2010 Objectives<sup>8</sup>**

- ✓ Increase the percent of 8 and 14-year-old children with dental sealants on their molar teeth to 50 percent.
- ✓ Reduce decay experience in children under 9 years of age to 42 percent.

### **Healthiest Wisconsin 2010 Objectives<sup>10</sup>**

- ✓ Increase the number of patients served in preventive programs by 25%.
- ✓ Increase the number of preventive dental programs in operation by 10.

## How is Wisconsin doing?

A 2002 survey revealed that:<sup>9</sup>

- ✓ 47 percent of Wisconsin third-graders (age 8 years) had at least one dental sealant.
- ✓ 60 percent of third graders had experienced tooth decay.
- ✓ 31 percent of third graders had untreated tooth decay.

## What is Wisconsin doing?

- ✓ In 2004-05, the Wisconsin *Seal a Smile* program is funding 12 agencies for school-based or school-linked dental sealant programs.
- ✓ In Wisconsin, 90 percent of the population on public water supplies receives fluoridated water.
- ✓ Limited funding is available to agencies for dietary fluoride supplement and school fluoride mouthrinsing programs.
- ✓ The Wisconsin Medical Assistance program reimburses for fluoride varnish applications by primary care providers.
- ✓ The Wisconsin Division of Public Health and the Division of Health Care Financing provides Early Childhood Caries prevention training (including the use of fluoride varnishes) to health professionals.

### Strategies for Wisconsin's Future

- ✓ Continue to promote and fund school-based dental sealants and other population-based programs such as water fluoridation.
- ✓ Increase public awareness of effectiveness of dental sealants to increase demand for sealants.

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